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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,265	05/15/2001	Philip R. McKee	068038.0108	2671

7590 09/10/2004

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EXAMINER
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LE, NHAN T

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/858,265

Applicant(s)

MCKEE ET AL.

Examiner

Nhan T Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,6 and 14-29 is/are allowed.
- 6) ☒ Claim(s) 1-4 and 7-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Specification*

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains more than a single paragraph. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (US 6,333,690) in view of Kauppi (US 5,953,667).

As to claim 1, Nelson teaches a system for detecting a presence and its duration in a given area, comprising: a mobile transmitter operable to periodically send a beacon signal having an unique identification code (see fig. 1, number 110, col. 4, lines 24-25),

a node at a location within a given area, the node including a receiver operable to receive the beacon signal and the unique identification code from the mobile transmitter in response to the mobile transmitter being within a threshold distance of the node (see fig. 1, number 130, see col. 4, lines 23-29). Nelson fails to teach the node operable to determine how long the mobile transmitter is within the threshold distance. Kauppi teaches the node operable to determine how long the mobile transmitter is within the threshold distance (see col. 4, lines 21-35). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Kauppi into the system of Nelson in order to determine the more accurate location of the mobile station within the location area.

As to claim 2, Nelson further teaches that the mobile transmitter uses a radio frequency transmission technique (see fig. 14, number 1410, col. 12, lines 51-59).

As to claim 3, Nelson further teaches the system of claim 1, wherein the node includes a transmitter operable to transmit an information signal to a base unit in response to receipt of the beacon signal, the information signal including information as to the unique identification code of the mobile transmitter and an identification code of the node (see col. 7, lines 6-13).

2. Claims 4, 7, 8, 9, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (US 6,333,690) as applied to claim 1 above in view of Kauppi (US 5,953,667) and further in view of Koshima (US 6,415,155).

As to claim 4, the combination of Nelson and Kauppi fails to teach the system of claim 1, wherein the information signal includes a signal strength of the received beacon

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signal as determined by the node. Koshima teaches the information signal includes a signal strength of the received beacon signal as determined by the node (see col. 3, lines 33-37). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Koshima into the system of Nelson and Kauppi in order to improve the accuracy for identify the position of a mobile terminal (see col. 2, lines 38-45, as suggested by Koshima).

As to claim 7, the combination of Nelson, Kauppi and Koshima further teaches the system of claim 1, wherein the node is operable to periodically send information signal to the base unit (see Koshima col. 8, lines 41-46).

As to claims 8,9, the combination of Nelson and Kauppi fails to teach teaches the system of claim 1, wherein the node is operable to send the information signal in response to a triggering event; the triggering event is a receipt of a request from base the base unit. Koshima teaches the system of claim 1, wherein the node is operable to send the information signal in response to a triggering event; the triggering event is a receipt of a request from the base unit (see col. 6, lines 26-33). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Koshima into the system of Nelson and Kauppi in order to identify the possible location range of the mobile terminal as desired by the base unit (see. col. 4, lines 16-24, as suggested by Koshima).

As to claim 13, the combination of Nelson and Kauppi fails to teach the system of claim 1, wherein the node continuously scans for the beacon signals. Koshima teaches the system of claim 1, wherein the node continuously scans for the beacon signals (see

col. 3, lines 40-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Koshima into the system of Nelson and Kauppi in order to accurately monitor the mobile location.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (US 6,333,690) as applied to claim 1 above in view of Kauppi (US 5,953,667) and further in view of Neyhart (US 5,939,988).

As to claim 10, the combination of Nelson and Kauppi fails to teach the system of claim 1, wherein the threshold distance is programmably adjustable. Neyhart teaches the system of claim 1, wherein the threshold distance is programmably adjustable (see col. 3, lines 47-51). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Neyhart into the system of Nelson and Kauppi in order to vary the distance at which the threshold condition occurs.

4. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (US 6,333,690) as applied to claim 1 above in view of Kauppi (US 5,953,667) and further in view of Sallen (US 5,661,460).

As to claim 11, the combination Nelson and Kauppi fails to teach the system of claim 1, wherein the node is operable to compare a signal strength of each beacon signal received to a reference signal strength associated with the desired threshold range in order to identify whether the mobile transmitter is within the threshold range of the node and a proximity of the mobile transmitter within the threshold range. Sallen teaches the system of claim 1, wherein the node is operable to compare a signal

strength of each beacon signal received to a reference signal strength associated with the desired threshold range in order to identify whether the mobile transmitter is within the threshold range of the node and a proximity of the mobile transmitter within the threshold range (see col. 1, lines 20-27, col. 2, lines 65-67. col. 3, lines 1-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Sallen into the system of Nelson and Kauppi in order to locate the mobile transmitter.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson (US 6,333,690) as applied to claim 1 above in view of Kauppi (US 5,953,667) and further in view of Cox (US 4,598,272).

As to claim 12, the combination of Nelson and Kauppi fails to teach the system of claim 1, wherein the mobile transmitter and the node are each powered by discardable standard batteries. Cox teaches the system of claim 1, wherein the mobile transmitter and the node are each powered by discardable standard batteries (see fig.1, child, number 14, parent, number 16, col. 3, lines 45-48). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the teaching of Cox into the system of Nelson and Kauppi in order to replace the system power easier and cheaper.

#### Allowable Subject Matter

Claims 5-6, 14, 15-21, 26-29 are allowed:

Regarding independent claim 5, Nelson (US 6,333,690) teaches wide area multipurpose tracking system, Koshima (US 6,415,155) teaches location system and

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method for identifying position of mobile terminal that can communicate base on repeater in radio zone, and mobile terminal that can communicate based on repeater in radio zone, Cox (US 4,598,272) teaches electronic monitoring apparatus, Neyhart (US 5,939,988) teaches child proximity monitor and alarm, Sallen (US 5,661,460) teaches distance determination and alarm system, Kauppi teaches location updating in a cellular radio network. The teaching of these prior arts either combine or alone fails to teach a duration of presence of the mobile transmitter within the threshold distance of the node in response to one or more informational signals.

Dependent claim 6 is allowable for the same reason.

Regarding independent claim 14, Nelson (US 6,333,690) teaches wide area multipurpose tracking system, Koshima (US 6,415,155) teaches location system and method for identifying position of mobile terminal that can communicate base on repeater in radio zone, and mobile terminal that can communicate based on repeater in radio zone, Cox (US 4,598,272) teaches electronic monitoring apparatus, Neyhart (US 5,939,988) teaches child proximity monitor and alarm, Sallen (US 5,661,460) teaches distance determination and alarm system, Kauppi teaches location updating in a cellular radio network. The teaching of these prior arts either combine or alone fails to teach the bacon signal attenuates at a rate of  $1/r^3$  with the desired threshold range, where  $r$  is a distance between the mobile transmitter and the node.

Regarding independent claims 15, 21, 26, Nelson (US 6,333,690) teaches wide area multipurpose tracking system, Koshima (US 6,415,155) teaches location system and method for identifying position of mobile terminal that can communicate base on



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repeater in radio zone, and mobile terminal that can communicate based on repeater in radio zone, Cox (US 4,598,272) teaches electronic monitoring apparatus, Neyhart (US 5,939,988) teaches child proximity monitor and alarm, Sallen (US 5,661,460) teaches distance determination and alarm system, Kauppi teaches location updating in a cellular radio network. The teaching of these prior arts either combine or alone fails to teach the determination how long a mobile transmitter was within the desired threshold range in response to a number of beacon signals received.

Dependent claims 16-20, 22-25, 27-29 are allowable for the same reason.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-29 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nhan T Le whose telephone number is 703-305-4538. The examiner can normally be reached on 08:00-05:00 (Mon-Fri).


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Nhan Le



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